

# PATENT ABSTRACTS OF JAPAN

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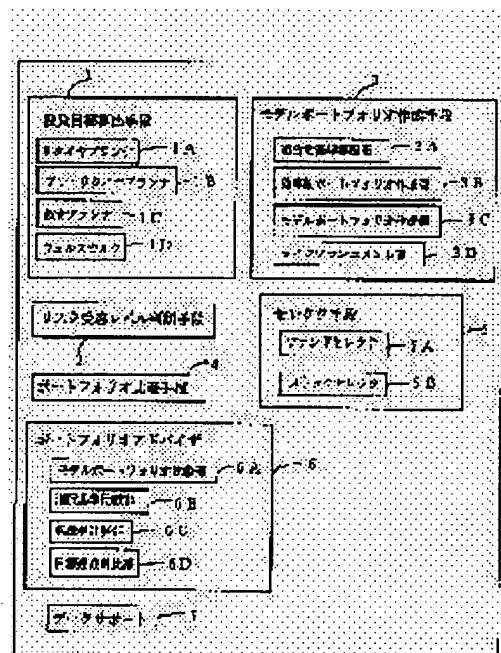
(22) Date of filing : 06.10.1997 (72) Inventor : KUBO KUNIYASU

## (54) TOTAL PORTFOLIO PLANNING SYSTEM

(57) Abstract:

**PROBLEM TO BE SOLVED:** To make it possible to plan an optimum portfolio matching with the objective target profit rate and risk allowable level of each investor, by preparing a model portfolio corresponding to the calculated result of the target profit rate and the judged result of the risk allowable level.

SOLUTION: A investment target calculating means 1 calculates an investment target amount corresponding to the life plan of the investor based on personal data and calculates the target profit rate considering an investment period. A risk allowable level judging means 2 judges the risk allowable level of the investor based on investigation data. A model portfolio preparing means 3 prepares the model portfolio corresponding to the calculated result of the target profit rate and the discriminated result of the risk allowable level. A portfolio comparing means 4 compares the model portfolio with the real portfolio and analyzes them. A selector means 5 automatically selects individual investment merchandise corresponding to the portfolio from the data base of individual investment objects based on a prescribed reference.



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## CLAIMS

[Claim(s)]

[Claim 1] An investment-objectives calculation means to be a portfolio planning system by the computer, to compute an investment-objectives frame according to an investor's life plan based on the inputted personal data, and to compute the target rate of return in consideration of an investment period, A risk acceptance level judging means to judge an investor's risk acceptance level based on the inputted investigation data, The synthetic portfolio planning system characterized by having a model portfolio creation means to create the model portfolio according to the calculation result of a target rate of return, and the judgment result of risk acceptance level.

[Claim 2] The synthetic portfolio planning system according to claim 1 with which the portfolio comparison means which makes the comparative analysis of a model portfolio and an investor's actual portfolio is added.

[Claim 3] The synthetic portfolio planning system according to claim 1 or 2 with which the selector means which carries out automatic selection of the investment product according to individual according to a model portfolio from the database of an individual investment outlet is added.

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

**[Field of the Invention]** This invention relates to the synthetic portfolio planning system which can plan the optimal portfolio which suited each objective target rate of return and risk acceptance level of an investor in detail about a synthetic portfolio planning system.

**[0002]**

**[Description of the Prior Art]** About the system which plans a portfolio by computer, various systems are developed from before. For example, the system which combines the investment product according to individual efficiently so that the rate of return of an investment product may be gathered, and the system which enabled it to presume the risk of an investment product with a sufficient precision are developed.

**[0003]**

**[Problem(s) to be Solved by the Invention]** By the way, creation of the portfolio about investment risk processing was only mathematical processing of that statistical attribute, using the past data in this application, although it was theory-ized by Sharp and MAKOBITSU both and was established as a present age investment portfolio theory. Therefore, since each system about the conventional portfolio cannot make each life plan or risk acceptance level of an investor reflect, it has the problem that the optimal portfolio which suited each target rate of return and risk acceptance level of an investor cannot be planned.

**[0004]** This invention is made in view of the aforementioned actual condition. That purpose Presentation of the portfolio by the past statistical data processing Limit to the restrictive use as a preliminary evaluation process, and it limits to presentation of the improvement direction by the comparative analysis with a present condition portfolio with a customer rather. It is in offering the synthetic portfolio planning system which can plan the optimal portfolio which suited each [ the synthetic technique ] objective target rate of return and risk acceptance level of an investor by combining with this with the automatic optional feature from investment database goods etc.

**[0005]**

**[Means for Solving the Problem]** As a means to attain said purpose, this invention An investment-objectives calculation means to be a portfolio planning system by the computer, to compute an investment-objectives frame according to an investor's life plan based on the inputted personal data, and to compute the target rate of return in consideration of an investment period, It is characterized by having a risk acceptance level judging means to judge an investor's risk acceptance level based on the inputted investigation data, and a model portfolio creation means to create the model portfolio according to the calculation result of a target rate of return, and the judgment result of risk acceptance level.

**[0006]** In this invention, it is desirable that the portfolio comparison means which makes the comparative analysis of a model portfolio and an investor's actual portfolio, and the selector means which carries out automatic selection of the investment product according to individual according to a model portfolio from the database of an individual investment outlet are added.

[0007]

[Embodiment of the Invention] Hereafter, the synthetic portfolio planning system applied to this invention with reference to a drawing is explained. The block diagram in which drawing 1 shows the synthetic portfolio plan structure of a system, the block diagram of hardware with which drawing 2 realizes this system, The combination matrix Fig. of the investigation data in which the judgment technique [ in / in drawing 3 / the risk acceptance level judging means of this system ] of the 1st step is shown, The combination matrix Fig. of the investigation data in which the judgment technique [ in / in drawing 4 / the risk acceptance level judging means of this system ] of the 2nd step is shown, The comment schematic diagram in L>S [ in / in drawing 5 / the life plan comment section of this system ], The comment schematic diagram in L<=S [ in / in drawing 6 / the life plan comment section of this system ], the flow chart with which drawing 7 shows the procedure of this system, drawing in which drawing 8 shows the input screen A of this system, and drawing 9 are drawings showing the input screen B of this system.

[0008] The synthetic portfolio planning system concerning this invention As it is a portfolio planning system by the computer and is shown in drawing 1 An investment-objectives calculation means 1 to compute an investment-objectives frame according to an investor's life plan based on the inputted personal data, and to compute the target rate of return in consideration of an investment period, It has a risk acceptance level judging means 2 to judge an investor's risk acceptance level based on the inputted investigation data, and a model portfolio creation means 3 to create the model portfolio according to the calculation result of a target rate of return, and the judgment result of risk acceptance level.

[0009] The portfolio comparison means 4 which makes the comparative analysis of a model portfolio and an investor's actual portfolio, and the selector means 5 which carries out automatic selection of the investment product according to individual according to a model portfolio based on predetermined criteria from the database of an individual investment outlet are added to said synthetic portfolio planning system.

[0010] The synthetic portfolio planning system of this invention is realized by the hardware of a configuration of being shown in drawing 2 . This hardware is constituted by the communication device H6 grade with the indicating equipments H5, such as the processors H4 and CRT which perform data processing of the store H3 which stores temporarily the input devices H2, such as the hard disk drive unit H1 which stores the program and data of a synthetic portfolio planning system, and a keyboard, the program to perform, and data, a program, and data, and an external database.

[0011] Said investment-objectives calculation means 1 inputs an investor's age, an occupation, and family structure as for example, personal attribute data, inputs an income, current expenditures, and un-geometrical expenditure as income-and-outgo data, inputs a price increase rate forecast, an interest rate, and a longevity forecast as a prerequisite, draws up an investor's life plan, and computes the investment-objectives frame according to a life plan as the difference of the amount disbursed and the income frame which are expected. And a "target rate of return" required in order to attain an investment-objectives frame is computed in consideration of an investment period. RITAIYA planner 1A, pre-RITAIYA planner 1B, educational planner 1C, WERUSU calc 1D, etc. are contained in this investment-objectives calculation means 1.

[0012] RITAIYA planner 1A is a means to compute the investment-objectives frame corresponding to the life design after retirement, and it computes "it is a need frame at the time of retirement" by it taking a future price increase rate into consideration, predicting the monthly amount living expenses after retirement, and predicting the life of his and a spouse. Therefore, the "monthly amount living expenses" in current prices, and a "price increase rate forecast" and "life forecast" of his and a spouse are inputted into RITAIYA planner 1A. And in RITAIYA planner 1A, the difference which deducted the income frame planned [ private pension / the retiring allowance, deposits and savings, a public old-age pension, ] is computed as an "investment-objectives frame" from "it being a need frame at the time of retirement", and a "target rate of return" is computed in consideration of an investment period required in order to attain a target figure. [ which was computed ]

[0013] Pre-RITAIYA planner 1B computes a "target rate of return" required in order to compensate an

insufficiency and to attain a target figure, when "it being a need frame at the time of retirement" and the amount of storage possible by the time of retirement are contrasted and the amount of storage runs short. [ which was computed ] The amount of storage possible by the time of retirement computes the financial funds which deducted expenditure of a tax, social insurance premiums, a family's living expenses, children's education dollar, the amount of payment of the amount with interest added of a debt, a contribution of public pension insurance, etc. from the income of the time of retirement of him and a spouse and which can be invested, and asks for them as an amount with interest added at the time of applying by the long-term interest rate which predicted this.

[0014] Educational planner 1C computes "the amount of month-long important point storage" required in order to prepare future children's educational fund in relation with the above "a target rate of return." Therefore, a "education-dollar storage period" is inputted into educational planner 1C as the "education dollar" in current prices, and a "price increase rate forecast." The average student life expense [ in / except house attending school and a house / respectively / attending school ] of a public university and a municipal university can carry out a reference input at an education dollar. And in educational planner 1C, a "target rate of return" is corrected so that "the amount of month-long important point storage" may turn into an impossible frame which is not.

[0015] WERUSU calc 1D is equipped with a "prices correction contemptuous glance label savings plan creation tool", a "savings target planning tool", the "target achievement plan creation tool classified by funding method", the "foreign currency deposit real interest rate count tool", the "pension present value count tool", and the "life pension present value count tool" as a file as a tool required for the various count in the investment-objectives calculation means 1. In addition, said tool can be changed into said WERUSU calc 1D if needed, and other tools can be added to it.

[0016] By combining the investigation data based on several investigation from which a viewpoint differs, the risk acceptance level judging means 2 covers a number step, and judges the risk acceptance level of each investor from whom character, investment experience, income and property, the float to target achievement, a life stage, etc. differ objective. Risk acceptance level means the level of how many "the risks (standard deviation)" to be able to receive. [ which is the differences of the "expected value" and the "occurrence" in an investment product ] The investigation item of the investigation data inputted into the risk acceptance level judging means 2 is as being shown in following Table 1 - 7, and these are displayed on a display H5 as an input screen.

[0017]

[Table 1] \* Primary investigation : a positive investment is planned without considering a (b) risk not much about an investment risk.

(b) Though it is unavoidable, I want to stop at the risk of whenever [ middle ].

(c) Consider that a high-risk high-return is just investment.

[0018]

[Table 2] \* Secondary investigation : since there is also little (b) investment experience about a general investment outlet, I want to stop to superior equity investment of safe deposits and savings or Japan.

(b) Although equity investment is also considered positively, I think that he wants to avoid the exchange risk which makes an investment [ foreign bond / foreign stocks or ].

(c) I want to restrict to American stocks and the American debenture with which foreign investment also has stable economy.

(d) If the investment purpose is suited, it will not limit about an investment outlet.

[0019]

[Table 3] \* 3rd investigation : if it is the best investment outlet in a (b) current time, consider that the profit target of investment cannot but accept the rate of return as a result as it is.

(b) I want to make the rate of return of average interest rate extent for the past 20 years into a target.

(c) I think that are recording which is extent which can attain a life plan is just performed.

(d) I want to aim at the rate of return of the base of X % at least.

[0020]

[Table 4] \* 4th investigation: -- the time of (b) investment having an allowances fund about investment

timing is always best timing -- think.

(b) the economic future is rather opaque -- think.

(c) Business also became good and rather consider it that a positive investment is appropriate after this.

(d) When interest rates are high, debenture investment is timing, and when interest rates are low, I think that equity investment is timing.

[0021]

[Table 5] \* 5th investigation : about the countermeasures in fall in price, since it was (b) miscalculation, it sells off immediately, and it will not dabble in investment with the risk whose price fall from now on.

(b) For investment, since price fluctuation is surely a certain translation, I think that they are the tips from which waiting for recovery of a price achieves success.

(c) Although having the stocks whose price fell, and an investment fund as it is does not settle down, hold as it is until other good investment opportunities come out.

(d) Examine whether for one year, after holding and seeing a result, possession is continued.

[0022]

[Table 6] \* 6th investigation : after investigating [ how / to decide an old investment outlet ] about a (b) investment outlet, an investment should be made, but since it is hard-pressed, well, the talk was heard and the investment product which an expert recommends has been decided each time.

(b) Since it retires and there are time allowances of enough, through and the investment product to which have been convinced have been enough selected for the eye also for the newspaper and the magazine each time.

(c) Since it cannot judge by itself, I think that the trust goods which the first-class expert is employing are the best. [ the thing with which sufficient investment outlet, or ]

(d) Since it is natural, that there is a risk in investment is trying to divide and make an investment [ class / different if possible ].

[0023]

[Table 7] \* 7th investigation : although a little stocks of the firm where a (b) them is working about investment experience are held, it is not much inexperienced in equity investment.

(b) Although it thinks that experience of equity investment is quite a certain direction, experience has only dealing of the stocks of a first section market the place which is the former.

(c) He is planning to study about investment and a bond with warrant and option investment have also been performed under advice of a securities firm.

(d) Although it is not only considering Japanese stocks but considering the United States as a core, an investment [ investment outlet / overseas ] is made each time.

[0024] With said risk acceptance level judging means 2, it sets to primary investigation. Risk acceptance level (low), When investigation data (\*\*) corresponding to (inside) and (quantity), (\*\*), and (Ha) are obtained and the investigation data (I, RO) corresponding to risk acceptance level (low), (inside), and (quantity), (Ha), and (d) are obtained in secondary investigation, as shown in drawing 3 Investigation data (\*\*) of primary investigation, (\*\*), (Ha), and the investigation data of secondary investigation (I, RO), The merge data of 1-9 is given by (Ha) and the combination matrix with (\*\*), and the risk acceptance level (low) of the 1st step, (inside), and (quantity) are judged by them corresponding to the group (1, 2, 3) of this merge data, (4, 5, 6), and (7, 8, 9). Furthermore, when investigation data (\*\*) corresponding to risk acceptance level (low), (inside), and (quantity), (I and Ha), and (d) are obtained in the 3rd investigation, as shown in drawing 4 The judgment result of the risk acceptance level (low) of the 1st step, (inside), and (quantity), The merge data of A-I is given by investigation data (\*\*) of the 3rd investigation, (I and Ha), and the combination matrix with (d).

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**TECHNICAL FIELD**

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**[Field of the Invention]** This invention relates to the synthetic portfolio planning system which can plan the optimal portfolio which suited each objective target rate of return and risk acceptance level of an investor in detail about a synthetic portfolio planning system.

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**EFFECT OF THE INVENTION**

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[Effect of the Invention] As explained above, according to the synthetic portfolio planning system of this invention Based on the personal data into which the investment-objectives calculation means was inputted, an investor's investment-objectives frame according to a life plan and target rate of return are computed objective. Based on the investigation data into which the risk acceptance level judging means was inputted, an investor's risk acceptance level is judged objective. Since a model portfolio creation means creates the model portfolio according to the calculation result of an investment-objectives frame, and the judgment result of risk acceptance level, the optimal portfolio plan which suited an investor's objective investment-objectives frame and risk acceptance level can be drawn up.

[0046] When the portfolio comparison means which makes the comparative analysis of a model portfolio and the actual portfolio is added, the improvement proposal of the contents of investment can be performed objective.

[0047] When the selector means which carries out automatic selection of the investment product according to individual according to a model portfolio from the database of an individual investment outlet is added, the investment product according to individual can be selected with a sufficient precision based on the present track record data.

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**TECHNICAL PROBLEM**

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[0004] This invention is made in view of the aforementioned actual condition. That purpose Presentation of the portfolio by the past statistical data processing Limit to the restrictive use as a preliminary evaluation process, and it limits to presentation of the improvement direction by the comparative analysis with a present condition portfolio with a customer rather. It is in offering the synthetic portfolio planning system which can plan the optimal portfolio which suited each [ the synthetic technique ] objective target rate of return and risk acceptance level of an investor by combining with this with the automatic optional feature from investment database goods etc..

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**MEANS**

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**[Means for Solving the Problem]** As a means to attain said purpose, this invention An investment-objectives calculation means to be a portfolio planning system by the computer, to compute an investment-objectives frame according to an investor's life plan based on the inputted personal data, and to compute the target rate of return in consideration of an investment period, It is characterized by having a risk acceptance level judging means to judge an investor's risk acceptance level based on the inputted investigation data, and a model portfolio creation means to create the model portfolio according to the calculation result of a target rate of return, and the judgment result of risk acceptance level.

[0006] In this invention, it is desirable that the portfolio comparison means which makes the comparative analysis of a model portfolio and an investor's actual portfolio, and the selector means which carries out automatic selection of the investment product according to individual according to a model portfolio from the database of an individual investment outlet are added.

[0007]

**[Embodiment of the Invention]** Hereafter, the synthetic portfolio planning system applied to this invention with reference to a drawing is explained. The block diagram in which drawing 1 shows the synthetic portfolio plan structure of a system, the block diagram of hardware with which drawing 2 realizes this system, The combination matrix Fig. of the investigation data in which the judgment technique [ in / in drawing 3 / the risk acceptance level judging means of this system ] of the 1st step is shown, The combination matrix Fig. of the investigation data in which the judgment technique [ in / in drawing 4 / the risk acceptance level judging means of this system ] of the 2nd step is shown, The comment schematic diagram in L>S [ in / in drawing 5 / the life plan comment section of this system ], The comment schematic diagram in L<=S [ in / in drawing 6 / the life plan comment section of this system ], the flow chart with which drawing 7 shows the procedure of this system, drawing in which drawing 8 shows the input screen A of this system, and drawing 9 are drawings showing the input screen B of this system.

[0008] The synthetic portfolio planning system concerning this invention As it is a portfolio planning system by the computer and is shown in drawing 1 An investment-objectives calculation means 1 to compute an investment-objectives frame according to an investor's life plan based on the inputted personal data, and to compute the target rate of return in consideration of an investment period, It has a risk acceptance level judging means 2 to judge an investor's risk acceptance level based on the inputted investigation data, and a model portfolio creation means 3 to create the model portfolio according to the calculation result of a target rate of return, and the judgment result of risk acceptance level.

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[0010] The synthetic portfolio planning system of this invention is realized by the hardware of a configuration of being shown in drawing 2 . This hardware is constituted by the communication device

H6 grade with the indicating equipments H5, such as the processors H4 and CRT which perform data processing of the store H3 which stores temporarily the input devices H2, such as the hard disk drive unit H1 which stores the program and data of a synthetic portfolio planning system, and a keyboard, the program to perform, and data, a program, and data, and an external database.

[0011] Said investment-objectives calculation means 1 inputs an investor's age, an occupation, and family structure as for example, personal attribute data, inputs an income, current expenditures, and un-geometrical expenditure as income-and-outgo data, inputs a price increase rate forecast, an interest rate, and a longevity forecast as a prerequisite, draws up an investor's life plan, and computes the investment-objectives frame according to a life plan as the difference of the amount disbursed and the income frame which are expected. And a "target rate of return" required in order to attain an investment-objectives frame is computed in consideration of an investment period. RITAIYA planner 1A, pre-RITAIYA planner 1B, educational planner 1C, WERUSU calc 1D, etc. are contained in this investment-objectives calculation means 1.

[0012] RITAIYA planner 1A is a means to compute the investment-objectives frame corresponding to the life design after retirement, and it computes "it is a need frame at the time of retirement" by it taking a future price increase rate into consideration, predicting the monthly amount living expenses after retirement, and predicting the life of his and a spouse. Therefore, the "monthly amount living expenses" in current prices, and a "price increase rate forecast" and "life forecast" of his and a spouse are inputted into RITAIYA planner 1A. And in RITAIYA planner 1A, the difference which deducted the income frame planned [ private pension / the retiring allowance, deposits and savings, a public old-age pension, ] is computed as an "investment-objectives frame" from "it being a need frame at the time of retirement", and a "target rate of return" is computed in consideration of an investment period required in order to attain a target figure. [ which was computed ]

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[Table 2] \* Secondary investigation : since there is also little (b) investment experience about a general investment outlet, I want to stop to superior equity investment of safe deposits and savings or Japan.

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[0021]

[Table 5] \* 5th investigation : about the countermeasures in fall in price, since it was (b) miscalculation, it sells off immediately, and it will not dabble in investment with the risk whose price fall from now on.

(b) For investment, since price fluctuation is surely a certain translation, I think that they are the tips from which waiting for recovery of a price achieves success.

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[Table 7] \* 7th investigation : although a little stocks of the firm where a (b) them is working about investment experience are held, it is not much inexperienced in equity investment.

(b) Although it thinks that experience of equity investment is quite a certain direction, experience has

only dealing of the stocks of a first section market the place which is the former.

(c) He is planning to study about investment and a bond with warrant and option investment have also been performed under advice of a securities firm.

(d) Although it is not only considering Japanese stocks but considering the United States as a core, an investment [ investment outlet / overseas ] is made each time.

[0024] With said risk acceptance level judging means 2, it sets to primary investigation. Risk acceptance level (low), When investigation data (\*\*) corresponding to (inside) and (quantity), (\*\*), and (Ha) are obtained and the investigation data (I, RO) corresponding to risk acceptance level (low), (inside), and (quantity), (Ha), and (d) are obtained in secondary investigation, as shown in drawing 3 Investigation data (\*\*) of primary investigation, (\*\*), (Ha), and the investigation data of secondary investigation (I, RO), The merge data of 1-9 is given by (Ha) and the combination matrix with (\*\*), and the risk acceptance level (low) of the 1st step, (inside), and (quantity) are judged by them corresponding to the group (1, 2, 3) of this merge data, (4, 5, 6), and (7, 8, 9). Furthermore, when investigation data (\*\*) corresponding to risk acceptance level (low), (inside), and (quantity), (I and Ha), and (d) are obtained in the 3rd investigation, as shown in drawing 4 The judgment result of the risk acceptance level (low) of the 1st step, (inside), and (quantity), The merge data of A-I is given by investigation data (\*\*) of the 3rd investigation, (I and Ha), and the combination matrix with (d). Corresponding to the group (A, B, C) of this merge data, (D, E, F), and (G, H, I), the risk acceptance level (low) of the 2nd step, (inside), and (quantity) are judged. Hereafter, the risk acceptance level (low) to the 6th step corresponding to the 7th investigation, (inside), and (quantity) are judged similarly. In addition, the above-mentioned investigation item and the judgment approach are instantiation, and changing suitably is possible and it is not limited to this.

[0025] The model portfolio creation means 3 creates the optimal asset allocation based on the deposits-and-savings, stocks, and investment product group of plurality over a long period of time, such as a government bond and corporate debenture, to a "efficient portfolio curve", and creates the model portfolio corresponding to a "target rate of return" and "risk acceptance level." Therefore, two or more investment product groups (index) whom the calculation result of the "target rate of return" in the investment-objectives calculation means 1, the judgment result of the "risk acceptance level" kicked for the risk acceptance level judging means 2, and an investor or investment advisers (financial institution etc.) chose and who can be invested are inputted into the model portfolio creation means 3.

[0026] The model portfolio creation means 3 has combination criteria calculation section 3A which computes each investment product group's combination criteria of having been inputted, efficient portfolio creation section 3B which creates the "efficient portfolio" which is the efficient allocation combination about each investment product group, model portfolio creation section 3C, and life plan comment section 3D.

[0027] Combination criteria calculation section 3A computes "the rate of expected earnings" for every inputted investment product group, and its "risk level", and computes whenever [ between goods / correlation ] about "risk level" further. About "the rate of expected earnings", it computes using the average profitability of the past of the investment product group concerned, and degree of dispersion which the track record value of the past of the investment product group concerned is distributing from average profitability is computed as "standard deviation" about "risk level."

[0028] Efficient portfolio creation section 3B displays the "efficient portfolio" about each investment product group on an output screen as an effectiveness limiting curve (illustration abbreviation). Meaning the combination from which risk level becomes "efficient" with the minimum to a specific rate of return, or the combination from which a rate of return serves as the highest to specific risk level, all the combination of the rate of return on an effectiveness limiting curve and risk level serves as a "efficient portfolio." Whenever [ correlation / of fluctuation of each investment product group (index) ] is used for the decision of a "efficient portfolio."

[0029] Model portfolio creation section 3C creates two or more portfolios which combined each investment product group at a different rate based on "the rate of expected earnings", and "risk level." "The rate of expected earnings" is made into a "target rate of return", and if the risk level is below "risk

acceptance level" when the portfolio from which "risk level" serves as min is chosen, the selected portfolio will be displayed on an output screen as optimal model portfolio on condition of a "target rate of return." Moreover, when risk level is more than "risk acceptance level", the portfolio from which "the rate of expected earnings" serves as max in the range of "risk acceptance level" is chosen. This portfolio is displayed on an output screen as a model portfolio on condition of "risk acceptance level" (illustration abbreviation). When a "target rate of return" and "risk acceptance level" do not satisfy a prerequisite, the portfolio on an effectiveness limiting curve is displayed as a model portfolio.

[0030] Life plan comment section 3D is (I for example, about risk acceptance level. : [ Low), ] (III (in II:) It considers as quantity) and consumer spending is made into the (S:standard level) (as L:life plan). A plan rate of return : as (P:plan longterm interest rates), (the average interest rate for the past A:ten years), and a (H:quantity rate of return) In L>S, a message is displayed on an output screen (illustration abbreviation) by clicking O1-O6, and X1-X6 according to the comment schematic diagram shown in drawing 5. Moreover, in L<=S, a message is displayed on an output screen (illustration abbreviation) by clicking Y1-Y3, and N1-N3 according to the comment schematic diagram shown in drawing 6.

[0031] For example, if the message of O1-O6 is illustrated, it will be as in following Table 8.

[Table 8] O1: "if a life plan is performed as planned, the preparation after the planned retirement can attain enough by employing operating funds by the rate of return of longterm-interest-rates extent." O2: "if a life plan is performed as planned, and operating funds can be employed by the about 1.5 times [ of the average interest rate for the past ten years ] target rate of return, the preparation after the planned retirement can be attained."

O3: "if a life plan is performed as planned, and operating funds can be employed for the purpose of average interest rate extent for the past ten years, the preparation after the planned retirement can be attained. Although an appropriate rate of return is a target, a prudent investment program is required for target achievement."

O4: "if a life plan is corrected to standard consumer spending and investment management remaining power is increased, the preparation after the planned retirement can be attained. For that purpose, reexamination of a life design and the strong volition which has it performed will be the requisite."

O5: "if a life plan is corrected to standard consumer spending, and investment management remaining power is increased and it can apply by the about 1.5 times [ of the average interest rate for the past ten years ] target rate of return, the preparation after the planned retirement can be attained. The investment program which carried out high-risk \*\*\*\*\* with reexamination of a life plan is required for target achievement."

O6: "if a life plan is corrected to standard consumer spending, and investment management remaining power is increased and it is applied for the purpose of average interest rate extent for the past ten years, the preparation after the planned retirement can be attained. Although an appropriate rate of return is a target, reexamination of a life plan and a prudent investment program are required for target achievement."

[0032] An output indication of each message is given also about X1-X6, Y1-Y3, and N1-N3. About the contents of this message, changing suitably is possible, and it is not limited to the above-mentioned example.

[0033] Said portfolio comparison means 4 is displayed on a display H5 by inputting an investor's current contents of investment by making the comparative-analysis result of the contents of investment, and a model portfolio into a concrete amount of money.

[0034] The selector means 5 has fund selector 5A for an investment fund, and stock selector 5B for an individual brand. Fund selector 5A makes automatic selection of the investment fund based on fixed criteria from the investment database of Japan and the United States. Moreover, stock selector 5B makes automatic selection of the investment stocks based on fixed criteria, such as business analysis of a first section market firm and a 2 section listed company, and grading investigation.

[0035] The portfolio adviser 6 and the data support 7 are further attached to the synthetic portfolio planning system of this invention. The portfolio adviser 6 has target achievement contrast section 6D etc. with model portfolio comparator 6A, basis-of-selection comparator 6B, and rate-of-return count

section 6C in order to manage the created model portfolio subsequently.

[0036] Model portfolio comparator 6A compares the created presentation track record of a model portfolio and a subsequent actual portfolio, and when a model portfolio needs to be changed, it has the function which creates a model portfolio anew. Moreover, basis-of-selection comparator 6B has the check function of whether the individual investment product selected concretely has separated from the basis of selection in modification of whether it has agreed in the original basis of selection, and grading etc.

[0037] Rate-of-return count section 6C calculates the income of a dividend and interest, and profit or loss on sale for every individual investment product, and has the function which indicates by comparison with the "target rate of return" planned at the beginning by making this into "the rate of return corresponding to an investment period." Moreover, target achievement contrast section 6D has the function which displays the savings situation of reserve assets as compared with annual another preparation target planned by pre-RITAIYA planner 1B.

[0038] The data support 7 has the function which chooses a required database out of the "database portfolio" prepared.

[0039] The synthetic portfolio planning system of this invention is processed along with the flow chart shown in drawing 7. First, menu screen A shown in drawing 8 is displayed on a display H5 (S1). A change indication of this menu screen A can be given at any time from other input screens and output screens with directions of that selection.

[0040] In menu screen A, if the "RITAIYA planner" which is the sub menu of an "investment-objectives check" is chosen with an input unit H2 (S2), the input screen B shown in drawing 9 will be displayed (S3). Then, if the personal attribute data (age, an occupation, family structure) which are an investor's personal data, income-and-outgo data (an income, current expenditures, un-geometrical expenditure), and a prerequisite (a price increase rate forecast, an interest rate, and life forecast) are inputted, an "investment-objectives frame" and a "target rate of return" will be computed by (S4) RITAIYA planner 1A (S5), and these will be displayed on an input screen B (S6).

[0041] If it returns to menu screen A and "risk acceptance level investigation" is chosen (S7), the input screen (illustration abbreviation) of the 1-7th investigation items shown in Table 1 - 7 will be displayed (S8). then -- each -- an input of a reply every [ per following investigation item / 1 ] judges the risk acceptance level (low) to the 6th step corresponding to the 7th investigation, (inside), and (quantity) objective with (S9) risk acceptance level judging means 2 (S10).

[0042] If it returns to menu screen A and a "life plan comment" is chosen (S11), the message which corresponds out of the message based on each risk acceptance level judging result as shown in Table 8 will be displayed on an output screen (illustration abbreviation) (S12).

[0043] If it returns to menu screen A and "model portfolio creation" is chosen (S13), the selector input screen for an individual brand will be displayed (S14). Then, if two or more investment product groups (index) who can make an investment are inputted (S15), the "efficient portfolio" about each investment product group will be displayed on an output screen by efficient portfolio creation section 3B as an effectiveness limiting curve (S16).

[0044] A closing of the output screen A displays two or more portfolios combined at a rate which changes each investment product group based on "the rate of expected earnings", and "risk level" with model portfolio creation section 3C on an output screen (illustration abbreviation). (S17) That is, "the rate of expected earnings" is made into a "target rate of return", and if the risk level is below "risk acceptance level" when the portfolio from which "risk level" serves as min is chosen, the optimal model portfolio on condition of a "target rate of return" will be displayed on an output screen. Moreover, when risk level is more than "risk acceptance level", the model portfolio on condition of "risk acceptance level" is displayed on the output screen B by choosing the portfolio from which it is in the range of "risk acceptance level", and "the rate of expected earnings" serves as max (S18).

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[Translation done.]

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ABSTRACT:

PROBLEM TO BE SOLVED: To make it possible to plan an optimum portfolio matching with the objective target profit rate and risk allowable level of each investor, by preparing a model portfolio corresponding to the calculated result of the target profit rate and the judged result of the risk allowable level.

SOLUTION: A investment target calculating means 1 calculates an investment target amount corresponding to the life plan of the investor based on personal data and calculates the target profit rate considering an investment period. A risk allowable level judging means 2 judges the risk allowable level of the investor based on investigation data. A model portfolio preparing means 3 prepares the model portfolio corresponding to the calculated result

of the target profit rate and the discriminated result of the risk allowable level. A portfolio comparing means 4 compares the model portfolio with the real portfolio and analyzes them. A selector means 5 automatically selects individual investment merchandise corresponding to the portfolio from the data base of individual investment objects based on a prescribed reference.

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